

SECTION 13. MAINTENANCE OF COMMON FACILITIES OR PROPERTY 13-1

13.A	COMPONENTS OF THE ORRINGTON SUBSTATION MAINTENANCE PLAN	13-1
13.A.1	<i>Maintenance of Facilities by Owner or Operator</i>	<i>13-1</i>
13.A.1.a	Site Owner or Operator	13-1
13.A.1.b	Contact Person Responsible for Maintenance	13-2
13.A.1.c	Transfer Mechanism.....	13-2
13.A.1.d	List of Facilities to be Maintained	13-2
13.A.1.e	Inspection and Maintenance Tasks for Each Facility	13-3
13.A.1.f	Identification of any Deed Covenants, Easements, or Restrictions.....	13-3
13.A.1.g	Sample Maintenance Logs	13-3
13.A.1.h	Copies of any Third-party Maintenance Contracts.....	13-3
13.B	MAINTENANCE OF FACILITIES BY HOMEOWNER'S ASSOCIATION	13-3
13.B.1	<i>Maintenance of Facilities by Municipality or Municipal District.....</i>	<i>13-4</i>
13.C	GENERAL INSPECTION AND MAINTENANCE REQUIREMENTS	13-4
13.C.1	<i>Drainage Easements</i>	<i>13-4</i>
13.C.2	<i>Ditches, Culverts, and Catch Basin Systems</i>	<i>13-5</i>
13.C.3	<i>Roadways and Parking Surfaces</i>	<i>13-5</i>
13.C.4	<i>Stormwater Detention and Oil Spill Retention Facilities</i>	<i>13-5</i>
13.C.4.a	Embankment Inspection and Maintenance.....	13-6
13.C.4.b	Inlet and Outlet Inspection and Clean-out	13-6
13.C.4.c	Emergency Spillway Maintenance	13-6
13.C.4.d	Sediment Removal and Disposal.....	13-6
13.C.5	<i>Stormwater Infiltration Facilities</i>	<i>13-7</i>
13.C.6	<i>Proprietary Treatment Devices</i>	<i>13-7</i>
13.C.7	<i>Buffers</i>	<i>13-7</i>
13.C.8	<i>Other Practices and Measures</i>	<i>13-7</i>

APPENDICES

APPENDIX 13-1: SAMPLE FORMS FOR SUBSTATION INSPECTIONS, SPCC PLAN
 AND INSPECTIONS, AND PROJECT EROSION CONTROL AND
 STORMWATER POLLUTION PREVENTION INSPECTIONS

SECTION 13. MAINTENANCE OF COMMON FACILITIES OR PROPERTY

Although Maine Electric Power Company (MEPCO) owns the land and some of the equipment at the Orrington Substation, Bangor Hydro-Electric Company (BHE) maintains that facility. The facility is not a commonly owned facility, however, and following construction, BHE will manage and maintain the project right-of-way (ROW), transmission line and the modified area of the Orrington Substation. There will not be commonly-owned facilities, land or property of any kind; therefore, an association responsible for maintaining such facilities will not be necessary and no deeds or other documents are attached to this section.

Generally, the proposed facilities will be operated and maintained in a manner consistent with good utility practices, including monthly and semi-annual substation inspections and inspection of the ROW and transmission line three times per year by helicopter or on-foot. Maintenance of the ROW will be conducted in accordance with the Northeast Reliability Interconnect (NRI) Post-Construction Vegetation Maintenance Plan (NRI Vegetation Maintenance Plan) provided in Section 10, Buffers, Appendix 10-1. The remainder of this section describes the maintenance plan for the Orrington Substation.

13.A Components of the Orrington Substation Maintenance Plan

13.A.1 Maintenance of Facilities by Owner or Operator

13.A.1.a Site Owner or Operator

Bangor Hydro-Electric Company
33 State Street
P.O. Box 932
Bangor, Maine 04402
Tel: 945-5621
Fax: 990-6955

13.A.1.b Contact Person Responsible for Maintenance

There is no one person assigned to the maintenance of these facilities. Facilities maintenance will be coordinated through the BHE project team, consisting of the:

- BHE Maintenance Planner;
- Chief Engineer;
- Environmental Services Supervisor; and
- Electrical Superintendent.

13.A.1.c Transfer Mechanism

This section is not applicable to this project.

13.A.1.d List of Facilities to be Maintained

Specifically for the NRI, the facilities to be maintained include the site improvements and equipment installed at the Orrington Substation, as follows:

Orrington Substation:

- Permanent access roads to the site;
- Ditches, drainage swales and catch basins associated with the roads and substation yard;
- Culverts with inlet and outlet protection;
- Existing oil spill secondary containment basin;
- New combined stormwater detention/oil spill retention pond and associated detention pond discharge structure, plunge pool and emergency spillway;
- Substation yard (crushed stone) and revegetated areas; and
- Electrical equipment and structures.

13.A.1.e Inspection and Maintenance Tasks for Each Facility

Descriptions of the inspection and maintenance tasks for each facility at the Orrington Substation are provided in Section 13.B. In addition, in accordance with 40 CFR Part 112.3(b), the existing Spill Prevention Control and Countermeasure (SPCC) Plan will be modified to include the proposed modifications to the Orrington Substation within six months after construction. The modified SPCC plan will include conducting routine spill prevention inspections and adhering to Maine's Best Management Practices (BMPs) for erosion control and stormwater pollution prevention including inspection of items such as temporary and permanent erosion control measures; stabilization of the substation site, road ditches, and the adjacent ROW; culvert, catch basin and detention/retention pond condition/performance; and identification of unreasonable/excessive erosion or sedimentation. Sample forms for substation inspections, project erosion control and stormwater pollution prevention inspections, and the current Orrington Substation SPCC Plan and inspection forms and are included in Appendix 13-1.

13.A.1.f Identification of any Deed Covenants, Easements, or Restrictions

This section is not applicable to this project.

13.A.1.g Sample Maintenance Logs

Sample maintenance and inspection logs are provided in Appendix 13-1.

13.A.1.h Copies of any Third-party Maintenance Contracts

This section is not applicable to this project.

13.A.2 Maintenance of Facilities by Homeowner's Association

This section is not applicable to this project.

13.A.3 Maintenance of Facilities by Municipality or Municipal District

This section is not applicable to this project.

13.B General Inspection and Maintenance Requirements

BHE inspects substations on a weekly and semi-annual basis, as part of an internal “Standard Operating Procedure” (SOP). The SOP is included as an attachment to the SPCC plan (see Appendix 13-1). Weekly inspections are performed by the electrical crew as part of the SPCC SOP, and the findings are documented on the “Orrington Sub Weekly Inspection” form (Appendix 13-1). The semi-annual inspections include a detailed visual inspection of all oil-containing equipment and spill containment measures at the substation using the “Orrington Substation SPCC Inspection Form” and “MEPCO Substations Secondary Containment Inspection Form” (Appendix 13-1). The weekly and semi-annual inspections will also include other features of the site as identified, on the “Post Construction Erosion Monitoring Inspection Form” and “Stormwater Pond Operation, Maintenance and Management Inspection Checklist” (also provided in Appendix 13-1). Maintenance will be performed on an as-needed basis, in accordance with recommendations made by the site inspector. Routine maintenance will include the immediate repair of newly formed channels or gullies; reseeding or sodding of bare ground; removal of trash, leaves and sediment; and control of woody vegetation. All components of the stormwater management system will be inspected for damage immediately following a 25-year storm event.

Maintenance issues associated with specific areas and facilities at the substation are identified in the following sections.

13.B.1 Drainage Easements

This section is not applicable to this project.

13.B.2 Ditches, Culverts, and Catch Basin Systems

The ditching, culverts and catch basins are to be inspected on a semi-annual basis, as identified in the Post Construction Erosion Monitoring Inspection Form. Any signs of existing or developing blockage of flow, erosion, channeling or excessive build up of sediment will be removed/repared as needed.

13.B.3 Roadways and Parking Surfaces

The roadways, parking surfaces, and substation surface (crushed stone) will typically require little on-going maintenance, owing to the limited and infrequent use. The site will be visited weekly, at a minimum, and inspected in detail semi-annually. Signs of existing or developing erosion, rutting or unwanted vegetation will be removed/repared as needed.

13.B.4 Stormwater Detention and Oil Spill Retention Facilities

There are two existing Secondary Oil Containment areas (one of which will be modified) associated with the oil-containing transformers at the Orrington Substation. The existing retention facility at the north end of the site is designed to retain any oil spilled from a transformer, while redirecting stormwater runoff away from entering the system. As described and shown in more detail in Section 12, Stormwater Management, the containment structure at the south end of the site will be rebuilt to function as both a stormwater detention and oil spill retention pond as part of the stormwater management system designed for the modified portion of the substation. These structures will be visually inspected on a weekly basis and in detail on a semi-annual basis, as part of the BHE SOP discussed above and as identified on the “MEPCO Substations Secondary Containment Inspection Form” and “Stormwater Pond Operation, Maintenance and Management Inspection Checklist”. The inspections will include documentation of signs of existing or developing erosion, pond embankment or liner failure, the build up of sediment, obstructions to flow, and signs of spilled petroleum. These ponds are also part of the SPCC 3-year inspection program. The build up of sediment in the retention/detention pond will be removed when the loss of pond volume exceeds 15 per cent.

13.B.4.a Embankment Inspection and Maintenance

The pond embankments, as well as all fill and cut slopes within the substation site will be inspected for erosion, destabilization, embankment settling, liner deterioration and other signs of structure failure. Corrective action will be taken immediately upon identification of problems.

13.B.4.b Inlet and Outlet Inspection and Clean-out

The detention/retention pond inlet and outlet structures and associated outlet plunge pool will be inspected as part of the semi-annual site inspection and on a weekly basis during wet weather conditions from March to November. Signs of developing erosion, obstructions to flow and excessive build up of sediment will be removed/repared as needed.

13.B.4.c Emergency Spillway Maintenance

Inspection of the emergency spillway for erosion, slope failure and blockage of flow will be included in the semi-annual inspection.

13.B.4.d Sediment Removal and Disposal

The culverts, catch basins, drainage channels, check dams, ponds and associated inlet and outlet structures will be inspected for sediment build up semi-annually as part of the site inspection program. The Orrington Substation is covered with a crushed stone surface, therefore the build up and removal of sediment is expected to be minimal.

13.B.5 Stormwater Infiltration Facilities

This section is not applicable to this project.

13.B.6 Proprietary Treatment Devices

This section is not applicable to this project.

13.B.7 Buffers

This section is not applicable to this project.

13.B.8 Other Practices and Measures

None.

APPENDIX 13-1

**SAMPLE FORMS FOR SUBSTATION INSPECTIONS, SPCC PLAN AND
INSPECTIONS, AND PROJECT EROSION CONTROL AND
STORMWATER POLLUTION PREVENTION INSPECTIONS**